

March 16, 2006

Commissioner James Boyd California Energy Commission (CEC) 1516 Ninth St. MS-4 Sacramento, CA 95814-5512

Re: Docket # 06-BAP-1

Dear Commissioner Boyd:

We commend the Governor and the CEC for recognizing the unfulfilled potential for biopower in the state and for their initiative in establishing the Bioenergy Interagency Working Group. We also commend Navigant Consulting for the quality of their thoughtful draft Bioenergy Action Plan.

Ridgewood Renewable Power is a clean energy independent power producer with dozens of facilities around the world. We own and operate a number of generating plants in California, including a facility that runs on landfill gas (LFG). We are also a substantial LFG electric generator in the U.K.

Our experience at the California LFG facility is indicative of the severe obstacles confronting biopower facilities in California. For several years, we operated the facility pursuant to a power purchase agreement, which at its peak generated almost 7.5 MW. When our agreement expired, we were unable to obtain a long term agreement at a sufficiently attractive price to justify producing electric power at that level. *As a result, we disconnected two of the existing California LFG engines (totaling 2.4 MW) and shipped them across the country to our landfill in the northeast* where we currently receive an attractive combination of energy and REC revenue. The LFG that was previously used to produce electricity for the California market is now simply combusted in several flares. Unfortunately, the situation is even more extreme, since the California facility has enough wasted flare gas to generate 25 MW or more. Ridgewood remains ready and able to develop the entire potential of this site if a viable California renewable energy market is developed.

Clearly, this experience is physical proof that there is a serious problem in the California market.

We submit the following brief comments and observations

1. The most serious problem is the lack of penalties or enforcement mechanisms when Load Serving Entities (LSEs) fail to meet the renewable targets. As a result, LSEs have every incentive to select the lowest bidder for renewable energy without regard to the likelihood that the bidder will actually be able to develop the project. Ridgewood has participated in California renewable RFPs and has come to understand that other prospective developers submit "low-ball" bids in order to win the long term PPA required to finance their project. Many of these developers are poorly capitalized and ill-equipped to successfully develop commercial projects. Having trimmed the profit margins close to zero (or lower), these projects then have a high rate of nonperformance, frequently fail to receive financing and often do not



generate any energy at all. Instituting enforceable penalties for LSEs that fail to meet the RPS required percentages is the only was to ensure that they will select reputable renewable developers who can produce the required renewable energy.

- 2. Ridgewood supports the establishment of specific biopower targets within the RPS. This will reverse the decline in biopower in the state and maintain biopower's 20% share of the in-state renewable generating portfolio. Landfill gas projects are necessarily smaller than large wind or geothermal projects and it is inappropriate for them to have to compete in the same RFP.
- 3. LFG projects generate benefits that are not adequately compensated for in the market. For example, LFG projects (and some other biopower projects) are located closer to population densities than large wind or geothermal projects and, therefore, result in much lower transmission expenses and line losses. Accordingly, the *delivered* cost of landfill gas generated electricity is generally substantially less than large wind or geothermal; however, the RFP process does not adequately recognize this distinction. In addition, LFG electric generation produces a two-fold emissions benefit. First, by using a wasted fuel, it offsets the emissions from the marginal fossil fuel generator. Second, LFG generation destroys methane, which has a GHG effect that is 22-23 times more destructive than CO2. Accordingly, each MW of LFG generation produces the equivalent GHG benefit of approximately 84 MW of solar or wind generation.<sup>2</sup>
- 4. As carbon trading regimes develop it will become increasingly possible to monetize this second benefit. It is important that the rules be clarified such that the transfer of renewable energy attributes does not include this second emissions benefit, in order to enable the LFG generator to monetize this ancillary value stream.

Thank you for your time and consideration of these comments. We would be pleased to work with the Commission or the Working Group on improving the market environment for biopower in the State.

Respectfully Submitted,

Stephen Galowitz Vice President, Business Development Ridgewood Renewable Power LLC

cc: Susan Brown

<sup>&</sup>lt;sup>1</sup> See e.g. Building a "Margin of Safety" Into Renewable Energy Procurements: KEMA, Inc. Report Prepared for California Energy Commission (January 2006)

 $<sup>^2</sup>$  LFG generation has a capacity factor of close to 100% compared to about 25% for solar and wind. The net GHG benefit from LFG, after deducting for CO2 created from the combustion, is 21. (4 x 21 = 84)